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A Brief Summary of Economic Conditions

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BEST NEWS OF THE MONTH was the continued prospect for some improvement this fall and winter in the domestic demand for farm products. Farm income is below 1937 figures but the disparity is expected to narrow in coming months. The BAE estimate of 1938 cash farm income from marketings and Government payments is 7.5 billion dollars compared with 8.6 billion in 1937. The decrease is attributed to lower prices of farm products affected by the marked decline in industrial activity and reduced consumer income during the past year. * * * Currently, interest centers in the compliance of winter wheat growers with acreage allotments designed to improve a burdensome wheat supply situation. Loans on surplus wheat, loans on cotton at rates ranging from 5.3 to 10.75 cents a pound, and an increase to 57 cents a bushel in the loan rate on old corn carried over from the 1937 crop were among the important Government announcements in late August.

Commodity Reviews

DEMAND: Improvement

NEARLY all doubts have been removed regarding the rise in business activity this fall. The index of industrial production for July was definitely up, with slight improvement also in employment and factory pay rolls. Orders for steel for the production of new automobile models, together with other business now in sight, seem to assure a substantial additional rise through October at least.

Farmers who are vitally interested in the business situation, because of its influence on prices and incomes received, now have two main questions: (1) Will the initial upswing in business continue, or be followed by a serious reaction; (2) how long will it be before the improvement is plainly reflected in prices of farm products?

Once a rise in business activity gets well under way, one favorable development leads to another, and the upswing tends to continue with only minor setbacks until interrupted by some combination of unfavorable circumstances sufficiently strong to upset the cumulative influence of the forces pushing upward.

Some of the possible retarding factors which might seriously interfere with the recovery movement now starting are: (a) The possibility of serious adverse developments in the foreign situation; (b) less favorable prospects for agriculture, with relatively low prices for some important crops accompanying increased stocks and the necessity of curtailing production; (c) difficulties in bringing various industrial costs and prices into better alinement; (d) a too rapid initial upswing of business activity and security prices might be followed by a sufficient reaction to bring a return of pessimism and postponement of longer time commitments on the part of business men. So far none of these possi-

bilities is sufficiently definite to warrant expectation of a severe reaction.

In the present recovery, as in others, consumer incomes and the demand for farm products are lagging behind the improvement in industrial production. Material increases in the demand for most farm products must await actual increases in the purchasing power of consumers. The demand for farm products which are stored for long periods or which are traded on futures markets no doubt already has been influenced somewhat by the improved business prospects, but this influence has been obscured by large increases in supplies, the effects of which have been only partly offset by the change in demand.

Also, commodities which are exported are not affected in the same way as others by improvement in domestic conditions. Prices of commodities which have been supported by Government loans also would not be expected to reflect the prospective increase in demand unless the latter were great enough to cause prices to rise above the loan value.

In view of these conditions, it is probable that the expected improvement in domestic business this fall and winter will not be reflected in the prices and incomes received by farmers in the same way as it would if conditions were more normal in other respects.

PRICES: Decline

Farm products prices in August lost all of the July gains. The index of prices received by farmers as of August 15 was 92, compared with 95 on July 15, and 123 in August a year ago.

Groups of commodities showing largest declines during the past month were grains, cotton and cottonseed, livestock, and truck crops. Dairy products as a group advanced a little, but not enough to offset reductions in other products.

The index of prices paid by farmers for commodities used in production and in family living declined 1 point, but at 122 the index was only 8 percent less than on August 15 last year. For the same period the index of prices received by farmers shows a decline of 25 percent.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid	Buying power of farm products ¹
1937			
August.....	123	132	93
September.....	118	130	91
October.....	112	128	88
November.....	107	127	84
December.....	104	126	83
1938			
January.....	102	126	81
February.....	97	126	77
March.....	96	125	77
April.....	94	125	75
May.....	92	125	74
June.....	92	124	74
July.....	95	123	77
August.....	92	122	75

¹ Ratio of prices received to prices paid.

FARM INCOME: Down

July receipts from marketings and Government payments raised the total of farmers' cash income from these sources to 4 billion dollars for the first 7 months of 1938, compared with 4.6 billions in the corresponding period of 1937.

BAE estimates that during the remaining 5 months income will amount to about 3.5 billions, making the total for 1938 approximately 7.5 billions. During the corresponding 5 months in 1937 the income was 4 billions. The total for 1937 was 8.6 billions.

January - July marketing income from crops declined more than income from livestock this year compared with last. From grains the income totaled 439 million dollars in the first 7 months, compared with 546 millions in 1937; from cotton and cottonseed, 183 millions compared with 205 millions; from fruits and vegetables, 511 millions compared with 703 millions.

Among the livestock items, income from meat animals was 1 billion dollars in the first 7 months of 1938, compared with 1.1 billions in 1937;

Prices of Farm Products

Estimates of average prices received by producers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States.

Product	5-year average, August 1909-July 1914	August average 1909-13	August 1937	July 1938	August 1938	Parity price, August 1938
Cotton, lb.....	12.4	12.3	10.5	8.4	8.1	15.7
Corn, bu.....	64.2	70.9	102.6	53.7	48.5	81.5
Wheat, bu.....	88.4	89.5	99.4	60.8	50.7	112.3
Hay, ton.....	11.87	11.35	8.97	7.11	6.82	15.07
Potatoes, bu.....	69.7	84.0	169.0	65.5	52.8	86.5
Oats, bu.....	39.9	40.9	23.5	24.0	20.3	50.7
Soybeans, bu.....	(?)	(?)	102.1	84.8	75.1	-----
Peanuts, lb.....	4.8	4.8	3.7	3.5	3.4	6.1
Beef cattle, cwt.....	5.21	5.08	7.64	6.74	6.38	6.62
Hogs, cwt.....	7.22	7.30	11.46	8.56	7.81	9.17
Chickens, lb.....	11.4	11.7	16.8	15.0	14.2	14.5
Eggs, doz.....	21.5	18.1	20.4	19.9	21.0	² 23.5
Butterfat, lb.....	26.3	24.1	31.6	24.2	24.1	³ 31.1
Wool, lb.....	18.3	18.8	31.4	18.7	19.5	23.2
Veal calves, cwt.....	6.75	6.59	8.69	7.88	7.95	8.57
Lambs, cwt.....	5.87	5.51	8.64	6.84	6.59	7.45
Horses, each.....	136.60	137.30	93.60	85.70	82.60	173.50

¹ Revised.

² Prices not available.

³ Adjusted for seasonality.

income from dairy products was 895 millions against 884 millions last year (the only major group showing an increase this year over last); income from poultry and eggs was 316 millions compared with 362 millions.

Rounding out the farm income picture is the income from Government payments, totaling 292 millions in the first 7 months of 1938 compared with 341 millions in 1937. Payments during the remainder of the year are expected to be considerably larger than in the last 5 months of 1937 when they totaled only 26 million dollars.

	Income from mar- ketings	From Govern- ment pay- ments	Total
July:			
1938---	\$609,000,000	\$35,000,000	\$644,000,000
1937---	740,000,000	11,000,000	751,000,000
1926---	710,000,000	24,000,000	734,000,000
January-			
July:			
1938---	3,693,000,000	292,000,000	3,985,000,000
1937---	4,238,000,000	341,000,000	4,579,000,000
1936---	3,835,000,000	193,000,000	4,028,000,000

WHEAT: Low Prices

Wheat in mid-August was selling at lowest prices in 5 years, then recovered following announcement of additional Agricultural Adjustment payments to growers who cooperate in adjusting acreage, and of Government interest in stimulating exports.

Although adjustment allotments have not been made separately for winter and spring wheat, the distribution of the total acreage allotment on the basis of average seedings during the past 5 years would indicate a total of about 38 million acres of winter wheat for 1939 harvest and 17 million acres of spring wheat.

Fifty-seven million acres were seeded to winter wheat for 1938 harvest; the annual average for the period 1927-36 was 46 million acres. Twenty-four million acres were seeded to spring wheat in 1938; the annual average for 1927-36 was 22 million acres.

Background of the wheat situation is the largest world supply on record,

4.9 billion bushels as contrasted with annual world disappearance of 3.8 billion bushels average during the last 10 years. It is estimated that world acreage of wheat is about 6 percent more than the area required, with average yields per acre, to produce a crop equal to the average annual disappearance during the 10 years 1927-36.

Unless world acreage is adjusted downward or there is improvement in the world demand for wheat, prospects are for an excessively large carry-over of old wheat when the 1939 crops are harvested. To protect their own producers, many wheat exporting countries have put into effect or are planning to effect minimum prices to growers. Importing countries are erecting trade barriers.

COTTON: Burdensome Supply

The world supply of American cotton this year will be slightly more than 25 million bales. This is the indicated size of the current crop plus the August 1 carry-over, the crop having been forecast at slightly under 12 million bales and the carry-over estimated at 13.4 million bales.

This prospective world supply of American cotton compares with about 25 million bales during the past year, with about 22 million bales average for the 5 years ended 1936-37, and with 26 million bales in 1932-33. Unless consumption is increased during the coming year, the world supply of American cotton next August 1 will be close to the largest on record.

Total production of foreign cotton is expected to be considerably less this year than last, but the world carry-over of foreign cotton on August 1 was probably at least 2.7 million bales larger than at the beginning of last season. The world supply of foreign cotton this year may be about 26 million bales.

The supply of American plus foreign cotton gives an approximate figure of 51 million bales for this year. This compares with a world supply of

50 million bales of all cotton in the preceding season, with about 42 million bales average for the 5 years ended 1936-37, and with 42 million bales in 1932-33.

As against a world supply of 50 million bales during the past season, world consumption has been estimated at about 26.8 million bales. Of this quantity, the consumption of American cotton was 11.3 million bales, and the consumption of foreign cotton was 15.5 million bales.

Domestic cotton prices declined rather steadily from early July to August 15, Middling $\frac{3}{8}$ inch in the 10 designated spot cotton markets averaging on the latter date 8.2 cents per pound. This compared with 11 cents per pound in the first week of August last year.

Government loans on the 1938 crop became mandatory under the Agricultural Adjustment Act when prices dropped to less than 52 percent of the July parity farm price.

FEED GRAINS: Big Supply

Total 1938 production of the 4 feed grains—corn, oats, barley, and grain sorghums—is indicated at 98 million tons. Total supply (including carry-over from last year's crops) will be about 111 million tons, or 7 million tons more than in 1937.

The supply per grain-consuming animal is the largest in more than 12 years, notwithstanding a probable increase in livestock numbers since January 1 last. The general level of feed grain prices in late August was the lowest in recent years.

Feeding ratios are expected to remain favorable to livestock producers during the remainder of the present year and during the early part of 1939. This will encourage further expansion in livestock numbers and a continuation of liberal feeding per animal.

The prospective 1938-39 hay supply—production plus the May 1, 1938 carry-over—is the largest since 1927. Supplies per animal will be

ample in all important livestock States, and unusually large in Iowa, Minnesota, and the eastern Corn Belt States.

Exports of domestic corn—116 million bushels—from October 1, 1937, through August 13, 1938, were the largest for this period since 1921-22. Exports are expected to continue fairly large during the fall and winter in view of the small Argentine supply.

CATTLE: Heavy Feeding

Features of the cattle situation are indications of large marketings of grain-fed cattle and smaller marketings of cows, heifers, and grass steers during the remainder of 1938 and in early 1939 than in the same period a year earlier.

Marketings of grain-fed cattle during this period, however, may be no larger than in recent months. The relatively large supply this fall and winter will be accompanied by a large seasonal increase in hog marketings, but the effect pricewise may be partly offset by improved consumer demand for meats.

Prospects are for a strong demand for stocker and feeder cattle this fall in view of indications for another large corn crop, and a large carry-over of old crop corn. This points to increased marketings of grain-fed cattle next year, but the increase may be more than offset by a reduction in marketings of cows and heifers.

Twelve percent more cattle were on feed in the Corn Belt this August 1 compared with last. In the eastern part of the belt the increase was 17 percent, in the western it was 8 percent. Increases by States: Illinois, 25 percent; Iowa, 22; Indiana, 20; Missouri, 15; South Dakota and Ohio, 10; Minnesota, 5. No change in Nebraska. Decreases: Wisconsin and Michigan, 5 percent; Kansas, 35.

The number of cattle on farms has been declining since 1934, due to short feed supplies resulting from droughts and to drought relief purchases of cattle and calves. There has been a tendency in some areas

during the past year to rebuild herds and increase numbers, a tendency which may become more pronounced in 1939. Barring the recurrence of severe droughts, the trend in cattle numbers is likely to be upward during the next few years.

HOGS: Price Decline

Prices of hogs in mid-July were the highest since last October, then declined and broke sharply during the second week of August. Large slaughter supplies and relatively poor consumer demand were factors.

Market receipts increased moderately in early August, and in recent weeks have included a relatively large number of late winter and early spring pigs. The market movement of spring pigs this year was getting under way somewhat earlier than usual.

Market supplies of hogs during the 1938-39 marketing year (beginning in October) will be much larger than in the year now drawing to a close, but their effect upon hog prices will be offset in part by improvement in consumer demand for meats.

Another favorable factor is that storage stocks of pork on August 1—379 million pounds—were the second smallest for that date in 23 years of Government record. Quantities of pork and lard in storage October 1 may be near record low levels.

Exports of pork and lard have been much larger this year than last. Imports of pork have been substantially reduced. Exports are expected to increase more during the coming year, imports to continue to decrease.

European demand for American hog products may be strengthened somewhat as a result of the prospective reduction in hog slaughter in several European countries.

LAMBS: Supply Up

A seasonal increase in slaughter supplies of sheep and lambs is expected during the next few months. In most years, lamb prices either weaken slightly or hold about steady from September through November. This

year any decline is likely to be less than in the fall of 1937, reflecting strengthening in consumer demand for meats from early summer levels.

The 1938 lamb crop—largest on record—was about 5 percent larger than in 1937. Increased production in the Western Sheep States, particularly in Texas, California, Wyoming, and South Dakota, more than offset a slight decrease in the Native States.

Despite abundant feed supplies, lamb feeding may be affected this year by the unfavorable results of last year's feeding operations. Another factor will be the disposition made of late lambs in Texas.

In some years, when lamb prices have been relatively low in the fall and prospects for wool prices the following year have been favorable, a large number of Texas lambs have been retained for sale the following year after being shorn, rather than being sold as feeders in the fall.

Up to mid-August, the number of western lambs purchased on contract for fall delivery, mostly for feeding, was relatively small, much smaller than the large number sold up to mid-August last year. Most of the western lambs purchased on contract thus far this summer have been at prices \$2 to \$3 lower than a year earlier.

WOOL: Improvement

Stocks of finished and semifinished woolen goods have been sharply reduced in recent months. Mill consumption in the second half of 1938 may show increases compared with the first half of 1938 and with the second half of 1937. Wool prices may advance.

BAE estimated in early August 369 million pounds of wool shorn or to be shorn in the United States this year, an increase of 2 million pounds compared with 1937 and with the 5-year average. The estimate does not include wool pulled from slaughtered sheep and lambs, which averaged 65 million pounds annually in the 5 years 1933-37.

Early estimates for several impor-

tant foreign wool-producing countries, including Australia, indicate smaller world production of wool this year than last. But the decline may be largely offset by the larger carry-over into the 1938-39 season. Total supplies may be about the same as in 1937-38.

United States imports of apparel wool for consumption were only 8.6 million pounds in the first half of 1938, compared with 120 million pounds in the first half of 1937, and an average of about 23 million pounds for the period in the 5 years 1932-36.

POTATOES: Seasonal Decline

Potato prices declined seasonally in August. In midmonth, in New York, potatoes averaged 76 cents per 100 pounds compared with 87 cents a year ago; in Chicago, potatoes (other than western stock) averaged 95 cents per 100 pounds compared with 1.21 a year ago.

Meanwhile, little change was reported in the condition of the late potato crop. A total of 301 million bushels was indicated for the late States excluding the California early crop. This is about 8 million bushels less than production in 1937, but about 2 million bushels more than the 1927-36 average.

Carlot shipments from the late States have been at a slower rate this season than last, but there has been a slightly heavier movement of nearby potatoes by motor truck. Also, a larger crop is being produced in the central nonsurplus producing States.

TRUCK CROPS: Production Increase

Prospective production of nine commercial truck crops in the late States shows increases averaging 16 percent over the 1937 production, and 36 percent above the 1927-36 average.

Increases compared with 1937 are indicated for snap beans, domestic cabbage, cantaloups, cucumbers, onions, and tomatoes. Decreases are indicated for cauliflower, eggplant, and watermelons.

Acreages planted to Danish-type cabbage in the late States, celery in the first section of late States, and tomatoes in southern California (except Imperial Valley) are larger than a year ago, and larger than the 10-year average.

Several truck crops advanced seasonally in prices on wholesale markets during the 4 weeks ended August 13, and a few were selling higher than a year ago, due mainly to differences in the harvesting season.

Production of sweetpotatoes has been indicated at 82.8 million bushels for 1938. This is 7 million bushels more than in 1937, and 12.5 million bushels more than the 1927-36 average. The usual seasonal trend of sweetpotato prices is sharply downward from July to October.

FRUITS: Low Priced

Prices of fruits appear to have been affected more this summer by reduced consumer incomes than by the supply of fruit. Although apples are in much smaller supply this year, prices have not been much above prices in the summer of 1937. The pear crop is only slightly larger than the 1937 record crop, but prices are considerably below prices a year ago.

The California grape crop is slightly smaller than in 1937, but prices of early table grapes have been materially lower than prices received last summer. Prices of oranges, lemons, grapefruit, and peaches also are comparatively low.

A total apple crop of 135 million bushels was indicated by August 1 conditions. This is 36 percent less than the 1937 crop, and about 11 percent less than the 1927-36 average. In mid-August, all varieties of eastern apples were averaging 97 cents a bushel at New York City.

A pear crop of 31.7 million bushels was indicated on August 1. This is about 7 percent more than the 1937 production, and 30 percent more than the 1927-36 average. Prices of eastern and western pears have been much below 1937 figures.

Total grape production for the 1938 season is indicated at 2.5 million tons, compared with 2.8 million tons in 1937, and with 2.2 million tons 1927-36 average. Prospects point to good crops of all three classes of grapes—raisin, wine, and table—in California.

SUGAR: Big Supply

Another relatively large world supply of sugar is in prospect for 1938-39. Stocks of sugar were larger in most European countries on May 1 this year compared with last (only Austria, Hungary, Holland, Italy, and Rumania show decreases). There were sharp increases in Java, the United States, and Cuba.

Production of canesugar in Louisiana and Florida totaled 460,000 tons—a new high record—in 1937-38; prospects are for a further increase this season. Production of beet sugar in the United States totaled 1,374,000 short tons, but a sharp increase is indicated for 1938-39.

World consumption of sugar in 1937-38 has been less than early estimates. Prices declined during the first part of 1938 from the comparatively high level maintained throughout 1937.

In the United States, prices of duty-paid raw sugar declined substantially during the first half of 1938, but the effect of this reduction on incomes of domestic producers probably will be offset by conditional payments provided for in the Sugar Act.

DAIRY PRODUCTION: Record

Milk production in early August was the largest on record for that time of year. Pastures were in generally good to excellent condition; supplies of feed grains and hay were above average; prospects were for continued heavy milk production through fall and early winter.

Improvement in consumer demand for dairy products is in prospect during coming months, but large production and heavy storage stocks of these products are offsetting factors—price-

wise. Prices may not rise by their usual seasonal amount.

Principal support to butter prices during the summer has been the buying of more than 25 million pounds of butter by the Government-financed Dairy Products Marketing Association. All this butter has been put into storage.

The average of farm prices of butterfat in mid-August was 24.1 cents, compared with 31.6 cents a year ago. Prices held rather steady this summer; they were low compared with prices received for meat animals; they were relatively high compared with prices of feed.

Since mid-April, London prices of Danish and New Zealand butter have been slightly higher than 92 score butter in New York. European butter production is now declining seasonally; production in New Zealand and Australia is at its lowest winter level.

POULTRY: Increase

A rapid increase in number of layers in farm flocks is in prospect during coming months. This is indicated by a less-than-usual decrease in numbers of hens during July, and a 13-percent increase this year over last in number of young chickens on hand July 1.

Egg production per hen was at a record high seasonal level on August 1. Total egg production, indicated by the average of farm flocks, was slightly less than a year earlier, but about 2 percent more than the 10-year average for that date.

Poultry marketings have been smaller this year than last, but were larger in July and are expected in the next 9 months to exceed shipments during the corresponding period a year earlier. Egg marketings have been below 1937 figures.

Storage stocks of frozen poultry totaled 53 million pounds on August 1, compared with 70 million on that date last year. Stocks of eggs—shell and frozen eggs—were 10 million cases against 13 million last August 1.

Foreign Governments Aid Wheat Growers

WITH a 1938 world wheat crop of record proportions in sight, widespread interest is again being manifested in what the governments of foreign wheat surplus-producing countries have done or are doing to protect growers from low prices.¹

Canada, the world's largest surplus producer and this year harvesting a crop expected to be the largest in 10 years, has already assured its wheat growers a minimum price of 80 cents per bushel for No. 1 Northern, delivered at Fort William. This guaranteed minimum, fixed by the Wheat Board early in August, will be paid for deliveries to the board from the current crop. Canadian growers, however, are free to offer wheat in the open market at world prices.

Establishment of a Wheat Board with authorization to purchase all wheat grown in the four western provinces whenever growers cannot sell in the open market at or above a fixed minimum price was provided for in the Canadian Wheat Board Act which became law on July 5, 1935. To insure that the job of moving wheat into channels of trade would be established as the principal function of the board a provision of the law states that it "shall market from time to time all wheat, or contracts for the purchase or delivery of wheat, which the board may acquire, for such price as it may consider reasonable, with the object of promoting the sale and use of Canadian wheat in world markets."

IN ARGENTINA a system of guaranteed minimum prices was in effect for several years, the minimum during 1935-36, the last year of its existence, having been 10 pesos per quintal (\$0.90 per bushel). No announcement has been made as yet by the Argentine Government as to guaranteed prices for wheat from the

coming crop. The Argentine harvest begins in December.

Under the Argentine minimum-price scheme a Grain Regulating Board was created with authority to enter the market and purchase wheat at fixed prices whenever world prices as reflected in the principal ocean and river ports should fall below a minimum established by the Government. Any losses sustained in connection with the sale of wheat by the board at less than the price paid for it, as well as the administrative expenses of the board, were to be defrayed from a fund derived from the profits realized by the Argentine Government in its purchase and sale of foreign exchange bills.

IN AUSTRALIA direct production and internal marketing bounties and special relief payments to wheat growers, rather than export subsidies, have constituted the principal means taken by the Government in recent years to relieve the distress caused by low wheat prices. Such grants were financed by a flour tax and by direct disbursements from the Federal Treasury. A plan providing for a guaranteed "home consumption price" to growers through the mechanism of a compulsory marketing scheme was enacted by several of the state legislatures in 1935 but was never put into operation.

In Russia all foreign trade is a monopoly of the Soviet Government and is regulated and administered in the light of the general objectives of the Government's economic and financial policy. Exports of wheat, as of other commodities, are centered wholly in the hands of the Government. The latter determines the quantities to be exported each season in accordance with its yearly programs which are not publicly stated. In determining its export policy the Government takes into account such factors as stocks, crop conditions, world prices, the

¹ Measures by wheat importing countries to protect growers were discussed briefly in the August issue of "The Agricultural Situation."

relative exchange value of wheat abroad compared with its value for consumption in the country, and the balance of international payments in general.

RUMANIA not only maintains a minimum-price system for wheat but pays export premiums on shipments abroad. A tax on flour sold by commercial mills is used to cover export premium payments but when the flour tax is not sufficient the Government covers the deficit from other sources of revenue. At the present time a premium of 100 lei per quintal (\$0.20 per bushel) is being paid on all exports to countries with a regime of payments in freely convertible currency. In order to prevent a seasonal decline in prices, the Government will begin purchasing wheat for army needs as soon as harvesting is completed. Such purchases will be made direct from producers.

The Bulgarian Government Grain Monopoly will continue to purchase wheat from farmers at fixed prices. It has been reported that the initial basic price for 1938 crop wheat will be fixed at 400 leva per quintal (\$1.35 per bushel) as compared with 330 leva (\$1.15 per bushel) last year. In the past the monopoly has sold its wheat to domestic mills at prices considerably above world market levels. Its sales for the export market, however, are made to Bulgarian exporters at prices somewhat below those prevailing in foreign markets.

The Yugoslav Privileged Export Co. will continue to purchase wheat from farmers at prices well above export parity. The prices at which the Privileged Export Co. purchases wheat are fixed from time to time by the Government. Prices at which the company will purchase new crop wheat have been fixed at from 144-160 dinars per quintal (\$0.91 to \$1.01 per bushel). Private firms are at liberty to buy wheat in competition with the Privileged Export Co. but can export it only upon receipt of a Government permit and only to countries making

payment in freely exchangeable foreign credits, which must be delivered to the Yugoslav National Bank.

IN HUNGARY export aids to wheat growers have long constituted an essential part of the Government's policy. Unique among such aids was the "grain ticket" system, which was in force between 1930 and 1934. This was in essence a bounty to producers financed by a processing tax and the revenue obtained by the sale of the "grain tickets" with the objective of maintaining the price to Hungarian farmers above the world parity while at the same time permitting exports at world market prices.

The "grain ticket" system was abolished at the end of the 1933-34 marketing year and the Government adopted a policy of making price stabilization purchases, for which purpose it uses mainly the "Futura" (the central marketing body of the Hungarian cooperatives). In that connection the Government establishes annual minimum prices at which wheat for Government account will be accepted. Such purchases are made only when the price on the free market falls below the fixed minimum. The Government has announced recently that it intends to set up a wheat reserve for the needs of national defense.

In addition to price stabilization measures practically all of the Danubian countries have negotiated special trade and clearing agreements with other European countries, notably with Germany, Czechoslovakia, and Italy. In some cases these provide for export quotas, in others for barter arrangements, and in still others for a combination of both. These agreements enable the Danubian countries to market wheat abroad, in certain cases against full payment and in others with partial payment in convertible currencies.

ALTHOUGH normally an importer of wheat, France, in recent years, has on several occasions found herself with exportable surpluses. Various

measures, including export subsidies, have been utilized by the Government to eliminate or reduce such surpluses. This year again the crop will be considerably in excess of needs probably to the extent of 50 to 60 million bushels. As a result, special measures will again have to be resorted to in order to handle the surplus. Among these will be provision for storage, reduced flour extraction ratios, denaturing of wheat and distillation

of wheat into alcohol. Whether export subsidies will be resorted to during the 1938-39 marketing season has not been announced as yet. The National Wheat Board established by a law of August 15, 1936, has wide authority to regulate and control wheat marketing, prices, storage, and transportation. In fact, imports and exports of wheat are a Government monopoly.

L. J. SCHABEN.

Helping Tenants Become Owners

CONGRESS has set aside (under provisions of the Bankhead-Jones Act) \$25,000,000 to help tenants buy farms of their own during this fiscal year, the loans to be made through the Farm Security Administration. The \$10,000,000 appropriated under the act last year was enough for more than 2,000 loans. Funds this year will be enough for about 5,000 additional loans. These 7,000 loans will spread over 700 counties, allowing for an average of 10 loans per county.

Funds are allotted to each State and Territory on the basis of its farm population and the prevalence of tenancy. The Secretary of Agriculture, with the advice of State Farm Security Advisory Committees, then selects the counties in which loans are to be made.¹ The number of farmers and proportion of tenants in the county, the amount of good land to be had at reasonable prices, and other pertinent facts guide the choice of counties.

LOANS are made only to farm tenants, share-croppers, farm laborers, and others who do not own a farm but who have been getting most of their income from farming. No loans are made to refinance mortgages of farmers who are already owners. Persons who can get a loan from any other source on reasonable terms to

Two out of every five farmers in the United States are tenants, farming land they do not own. One tenant out of every three moves to a new farm each year. Only 3 in 10 stay on one farm long enough to carry out a 5-year crop rotation. In many areas, landlords, tenants, and the land grow poor.

As one approach toward remedying this situation, Congress passed the Bankhead-Jones Farm Tenant Act, to enable competent tenants to become farm owners. Under the terms of this act, tenants, share-croppers, and farm laborers can borrow money to buy land. How to obtain loans is described in the accompanying article.—Ed.

buy a good farm—as in the case of farmers able to borrow through the Farm Credit Administration²—cannot receive loans.

All borrowers must be citizens of the United States. Preference is given to married persons or persons with dependent families, to persons able to make a down payment, or to persons who own livestock and equipment necessary to carry on farming operations.

Since funds are not large enough to reach all counties this year, a farmer

¹ A list of the 700 counties is obtainable from the Farm Security Administration, Washington, D. C.

² How to obtain Farm Credit Administration loans was described in the August issue of "The Agricultural Situation."

must live in one of the 700 selected counties before he can apply for a loan. When additional funds are made available and the program is expanded, other counties will be selected and qualified residents of these counties given an opportunity to apply.

Every tenant who lives in a county where loans are to be made this year can get an application blank from the county rehabilitation supervisor who serves his county. It should be filled out carefully and returned to the supervisor either personally or by mail. Usually it is advisable that the applicant call at the office of the supervisor and talk the matter over with him or his assistant. The supervisor's address may be obtained from the county agricultural agent.

Congress has provided that three farmers living in each of the selected counties shall be appointed on a committee to certify which applicants shall be eligible for loans. It is their duty to choose farmers whose character, ability, and experience will make them likely to carry out the undertaking with success.

FARMERS who are to get loans will have a wide choice in selecting the farm they want to buy. However, it must be a family-size farm on which, in general, the family can do all the necessary work. The farm should be big enough and fertile enough to produce a good living for the family and enable it to pay off the loan. The price of the farm must be in keeping with its true value and earning power, as found by the county committee and Farm Security Administration appraisers.

Loans will include all funds needed to make repairs to existing buildings, to construct fences, improve land, or when necessary, to build new buildings. Funds will also be available to bring the residence and other buildings to such a state of repair that the family may enjoy reasonable comfort, health and convenience.

The loans will be secured by a first mortgage or deed of trust on the farms

purchased. The borrower must agree to pay taxes and insurance on the farm buildings, to keep the farm in repair, and to prevent waste and exhaustion of the land.

Down payments are not required, although more than half of those who received loans during the past fiscal year made down payments, averaging \$170. The Farm Security Administration regards as chief security for the loan the character of the borrower and his willingness to follow sound farm practices on his new farm. The Administration will help borrowers to develop sound farm and home plans, to work out operating budgets, and to keep business-like records.

LOANS are made for a 40-year period at 3 percent interest. However, the act provides that after 5 years payment in full may be made at any time. The regular annual payments will be 4.3 percent of the sum borrowed. This amount will pay interest on the loan at 3 percent and retire the principal in 40 years. Borrowers also will be given an opportunity to make their annual payments under a variable payment system which adjusts the amounts due each year to his ability to pay. Under this system, larger payments may be made in years when crop production and prices are favorable, with relatively smaller payments due in years of partial crop failure or low prices.

Tenant purchase loan funds can be used only for the purchase and improvement of a farm. Preference is given to persons who own livestock and equipment necessary to carry on farming operations, but it will be possible, under certain circumstances, for the borrower to obtain a rehabilitation loan from the Farm Security Administration. When circumstances warrant, these loans may be made available for the purchase of necessary feed, seed, farm supplies, livestock, farm equipment and other operating goods.

C. B. BALDWIN,
Farm Security Administration.

Grade and Label Barriers

IN THE field of legislation affecting the marketing of agricultural products, laws providing for grade standards and regulating the labeling of packages and containers occupy a prominent place. Twenty-five years ago only a few scattered instances of such laws were to be found on the statute books. Since then there has been a tremendous growth of this type of legislation.

This increase has been in response to a growing need. As the market for a product widens and sellers and buyers find themselves farther apart, buying on inspection becomes less satisfactory as a method of doing business. Widely recognized grades offer a solid basis for dealings between sellers and buyers and thus aid in an easy and efficient interchange of goods. At the consuming end, retail grades aid consumers to buy more wisely and to register their preferences more effectively.

NOT all grading and labeling legislation, however, has been drawn up to facilitate trade and to aid consumers, nor has all of it been uniformly effective in promoting these aims. Particularly in the past few years there has been a tendency to use grading and labeling legislation to give producers within the State special advantages over producers outside the State, and to attempt to hinder the flow of agricultural products rather than to facilitate it.

Just such a purpose is reflected by a marketing official in a Western State, who said:

"Before we started to 'tighten up' and have border inspection stations for fruits, vegetables, and other agricultural products, surrounding States were using our State as a dumping ground for their inferior products, at a cut price, * * * very much to the disadvantage of the (local) grower."

In other cases laws which by themselves offer no obstacles to the flow of goods do nevertheless raise difficulties in practice because their requirements

are not uniform with requirements in other States.

THERE are several ways in which grading and labeling legislation can be used to discourage the flow of products across State borders. Some of the most important of these are described below.

1. **Misleading labeling.**—Formerly the egg laws of a number of the South-eastern States classified eggs produced within the State as fresh. In two States an egg was classified as fresh if it had been produced in the State and if it had not been in cold storage for any length of time and was not "partially or wholly decomposed." These laws at the same time required eggs brought into the State from outside to be labeled "shipped" and eggs which had been in cold storage, "storage." Thus these laws encouraged the use of the word "fresh" in connection with eggs, a large proportion of which might be of inferior quality. Happily, except for vaguely worded laws in one or two States, there are no instances of legislation of this type on the books at the present time.

2. **"Buy-at-home" appeals.**—Labeling legislation is sometimes used in connection with "buy-at-home" campaigns. Good reasons can be advanced for requiring agricultural products to be labeled with the State of origin. However, it may be questioned whether it is not obstructive to interstate trade for a State to require labeling of a product that has been produced within the State, as a part of a "buy-at-home" campaign. Some States appear to be following programs aimed at persuading consumers not to buy products of other States.

3. **Definition of standards.**—Grade specifications may be drawn up in such a way that producers within the State will have an artificial advantage over producers outside of the State. Thus, one State requires that all eggs sold in the top grade be produced within the State.

Complaint has been made that the

Federal egg standards give an artificial advantage to producers who are close to market. To qualify in either of the two top grades (at wholesale) an egg must have a nontremulous air cell. It is contended by some that transportation of eggs tends to create tremulous air cells but does not in any way injure the quality of the eggs. Therefore, it is contended, eggs produced at a distance from the market do not have the same chance as nearby eggs to qualify for the two top grades, even when the eggs are of as good quality. This is, of course, a question for the experts to decide.

The argument illustrates neatly, however, the point in question here, that the grade specifications set up may work to the advantage of one group of producers as against another. To escape the charge of unfairness, grade specifications must be firmly based on quality factors or other characteristics desired by consumers, and on these only.

4. Nonuniformity.—Probably the most fruitful cause of embarrassment to trade among the States which may arise from grading legislation is non-uniformity of grade specifications, in combination with the compulsory use of such grades. Where different States have different grade specifications this leads to difficulty. For example, trucks bringing fruits and vegetables from Washington and Oregon into California are stopped at border inspection stations. If the produce is not graded and labeled in accordance with California standards it must be unloaded, repacked, and relabeled. Particular difficulty is reported by Washington growers whose apples are trucked into California. The Washington apple grade specifications do not take condition into account whereas the California specifications do.

California is not alone in stopping truck shipments at the border. Utah,

Oregon, and Montana also do this. Montana, in addition, charges an inspection fee.

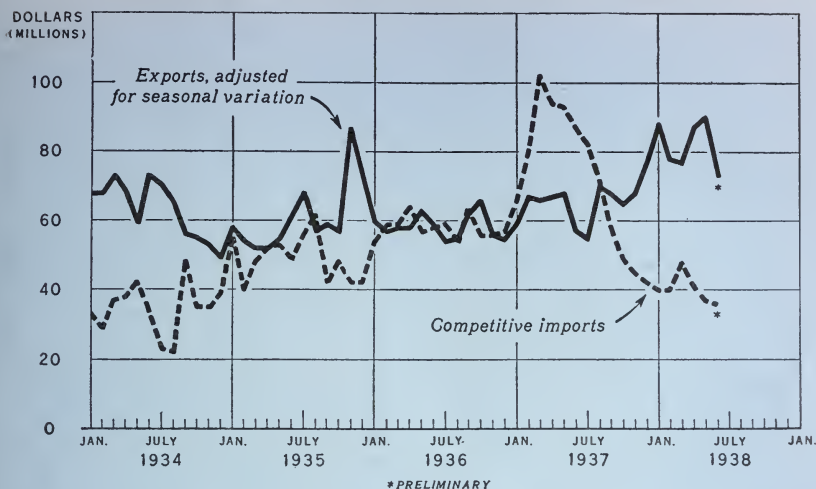
A recent New York law required that fruits and vegetables brought into the State of New York be graded in accordance with the Federal standards (although it did not require the same thing of produce grown within the State). While Federal standards are widely used throughout the United States, there is a vast amount of produce which is not graded in accordance with such standards. Here again the difficulty is one of nonuniformity.

After several extensions of time granted by the New York Department of Agriculture for out-of-State producers to adjust their marketing methods to the requirements of the law, the law was finally repealed before active enforcement took place. Until such time as all important fruit and vegetable producing States may require the use of Federal standards it would seem that legislation of the New York type would disrupt interstate commerce in fruits and vegetables.

IT IS obvious that there is serious danger of ill will arising among the States as a result of unwise legislation of the kinds which have just been described. The temptation to retaliate is strong. For instance, a bill was introduced in the legislature of one State which, had it been passed, would have required every orange and lemon sold within the State to have stamped upon it its exact weight to the grain, and the name of the variety—*provided*, that if the fruit originated in a State which permitted strawberries to be sold in the containers commonly used by producers of the State in which the bill was being proposed, these requirements would not apply.

EDGAR L. BURTIS.

U. S. FOREIGN TRADE IN AGRICULTURAL PRODUCTS



Exports Up, Imports Down

EXPORTS of United States farm products were up 22 percent during 1937-38 from their 1936-37 value. Competitive farm imports¹ dropped 32 percent. As shown in the accompanying chart, the fall in imports was even more rapid than the rise in exports.

Although a number of factors affected our agricultural trade during the year, it was most greatly influenced by (a) above-average 1937 crops following several years of low yields due to unfavorable weather and (b) declining United States industrial activity.

Both factors operated to decrease our imports. Good crops meant increased domestic supplies and correspondingly less need for imported farm products. Decreased industrial production meant less demand for industrial raw materials such as wool and hides which we usually import in large amounts.

¹ Competitive farm imports include all agricultural imports except certain products (such as coffee, rubber, most spices, tea, and cocoa) which are not produced commercially in the United States and do not enter into competition with American farm products to any significant extent.

Good crops also operated to increase our exports, since large supplies meant larger surpluses available for shipment abroad.

Other important factors in the situation were a shortage in foreign grain supplies and the reduction of foreign trade barriers under the trade agreements program of the United States. Benefits under the program were enjoyed during the year by a large number of our farm products, including fruits, nuts, vegetables, dairy products, and certain grains and grain products.

GRAINS dominated the export picture. Our bumper 1937 crops enabled us to put an export surplus in world markets at competitive prices for the first time in 4 years. Because of poor crops in other important producing countries, foreign countries bought more of our supplies. The quantities taken compared favorably not only with drought years but also with some of the years before excessive trade barriers became widespread. This is shown in the following table:

Year ended June 30	Wheat and wheat flour	Corn and meal	Barley grain	Milled rice	Rye	Oats and oat- meal	Buck- wheat
Average:	1,000 bushels	1,000 bushels	1,000 bushels	1,000 pounds	1,000 bushels	1,000 bushels	1,000 bushels
1925-29.....	191,589	23,135	32,291	176,115	24,084	19,516	224
1930-34.....	99,746	6,261	10,404	179,603	814	4,458	141
1936-37.....	21,684	553	5,153	48,285	248	912	1
1937-38 Preliminary.....	107,295	104,061	17,614	295,773	6,578	12,331	379

The increase in the value of grain exports over last year was 180 million dollars. Tobacco exports increased by 20 million dollars, and fruit exports by 11 million. There were smaller increases in exports of a large number of other commodities. Cotton exports declined 71 million dollars in value, but increased in quantity.

COMPETITIVE farm imports may be roughly divided into two groups: (1) products regularly imported in large quantities; (2) products imported in substantial amounts only when there are unusual shortages of domestic supplies. Of the decline of 279 million dollars in imports during 1937-38, about half was attributable to each of the two groups.

In the regularly imported group, principal declines were 41 million dollars in wool imports, 33 million in sugar and molasses imports, and 26 million in hides and skins. Except for sugar, these declines and most other decreases in this group were due to reduced activity in the industries which use these imported materials. For example, the index of United States factory consumption of wool fell from 132 in May 1937 to 90 in June 1938. The index of United States production of leather and

leather products fell from 133 to 91 for the same months.

The decrease in sugar imports was due largely to a fall in prices associated with the entire domestic economic situation. Under the quota control in effect during recent years, the quantity of sugar imports was not permitted to rise to any important extent during the period of improving domestic demand. Hence, imports fell only slightly—5 percent—during the year of declining demand just closed.

PRINCIPAL declines in the emergency (in this case, mainly "drought-caused") import group were in grains and feeds. Wheat and wheat flour imports declined by 44 million dollars, corn imports declined by 21 million, barley imports by 14 million, and wheat byproduct feeds by 10 million.

There were smaller reductions in other grains, egg products, and most dairy products. There was a reduction of 24 million dollars in imports of vegetable oils, which probably should be considered in the "regularly imported" group, but which are affected by the shortage of domestic fats and oils usually following a drought.

R. B. SCHWENGER.

Farmers were hiring the same number of hands this summer as last, and employing a little more family labor. More workers were being employed (August 1) in New England, Middle Atlantic, West North Central, West South Central, and Mountain States, fewer in other sections of the country.

Cutting and threshing of wheat was in progress in many areas of the Pacific Northwest and the Great Plains on August 1, the oat harvest in the Ohio Valley was nearing completion, fall plowing was beginning in Oklahoma and Kansas. Pears, sugar beets, and vegetables were being harvested in California.

Seasonal peak of farm labor employment will be reached in October. Wages have been only slightly lower this summer than last.

Electricity Rates on the Farm¹

ELECTRICITY is becoming an important item in the cost of farm living and in the cost of operating farms. The number of farms in the United States served by central electric stations increased from 205,000 in 1924 to 576,000 in 1929, and by the end of 1937 totaled 1,242,000.²

Data obtained by the survey of consumer purchases made by the Bureau of Home Economics, indicated that farmers spent about 68 million dollars for electric current in 1936, an average of \$10 for all farm families in the United States and about \$65 per farm using electricity. Approximately two-thirds of this expenditure is chargeable to farm living, one-third to the operation of the farm.

Electricity was used on farms only to a very limited extent before the World War, as farmers generally lived far from generating plants and the cost of generating, transmitting, and distributing the current was high. Electric lighting for residences in cities, however, had become rather common.

In recent years the costs of getting electricity to the farms have been materially reduced, and farmers in many areas are now using electricity for lighting homes and for power. Material reductions in rates and Government aid through the activities of the Rural Electrification Administration are encouraging a rapid expansion in the use of electricity on farms.

THE Bureau of Agricultural Economics in 1936 collected data on rates charged for electricity to farmers in selected periods from 1910-14 to 1936. The results of this survey indicate that electric rates for farm

residence in 1936, for the country as a whole, averaged about 83 percent of pre-war rates and that the greatest reduction in rates took place after 1929. Power rates have been reduced more than light rates, averaging in 1936 only about 58 percent of pre-war rates. From 1929 to 1936, power rates declined about 30 percent, whereas light rates declined only about 15 percent.

Rates for electric lighting in cities also have declined. Data collected by the National Industrial Conference Board indicate that the average rate for city lighting in 1936 was about 30 percent lower than in 1914.³

The actual cost of electricity to the farmers distant from town, however, probably has been reduced much more than indicated by the decline in rates charged. Formerly the farmer had to bear a considerable part of construction and equipment costs, whereas power companies now generally bear these costs and, as a general rule, the farmer pays only for that part of the line from the road to his residence. However, he still may be required to guarantee a minimum bill considerably higher than what may be required of the city resident.

INDEx numbers of changes in electricity rates for farm residence and farm power are shown by regions in the following tables. Rates for farm home in 1936 were lowest relative to 1910-14 in the New England and Middle Atlantic regions, whereas rates for farm power were lowest compared with pre-war in the West South Central and Mountain regions. Although, in general, residential rates to farmers tended to remain fairly stable from 1910-14 to 1929, power rates have shown a marked continuous decline since 1920.

¹ Estimates prepared by Arthur G. Peterson and Nathan M. Koffsky, under direction of the Farm Income Committee.

² In addition to the farms served by central electric stations, there are approximately 250,000 farms with individual lighting plants.

³ Cost of Living in the United States, 1914-36, by M. Ada Beney (National Industrial Conference Board).

Residence—Index Numbers of Weighted Average Monthly Bills to Farmers for Electricity in Selected Years, 1910-14 to 1936, by Regions

[1910-14=100]

Year	New England	Middle Atlantic	East North Central	West North Central ¹	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States
1910-14.....	100	100	100	-----	100	100	100	100	100	100
1920.....	110	102	117	-----	117	100	96	100	114	109
1924.....	91	97	107	52	112	90	90	100	103	98
1926.....	86	91	111	55	97	90	87	100	102	96
1929.....	82	83	97	98	98	87	99	125	82	98
1932.....	80	86	94	100	88	79	91	91	78	93
1936.....	63	67	93	88	70	71	75	84	74	83

Power—Index Numbers of Weighted Average Monthly Bills to Farmers for Electricity in Selected Years, 1910-14 to 1936, by Regions

[1910-14=100]

Year	New England	Middle Atlantic	East North Central	West North Central ¹	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States
1910-14.....	100	100	100	-----	100	100	100	100	100	100
1920.....	114	101	118	-----	173	159	80	100	96	113
1924.....	114	94	110	117	140	159	77	100	81	106
1926.....	108	88	94	121	126	159	67	100	81	100
1929.....	78	78	77	82	128	139	31	125	63	82
1932.....	66	72	70	85	103	121	29	53	61	73
1936.....	63	53	52	77	80	86	27	49	51	58

¹ Data were not available prior to 1924. The index number for the West North Central region was made equal to the United States average in 1929.

The index numbers of weighted average monthly bills to farmers for electricity are essentially price indices. They show the trend in the cost of a fixed composite quantity of electric current as a percentage of the 1910-14 average. The index numbers should not be considered as a measure of the changes in actual expenditures for electricity since the quantity of electricity used on farms is now considerably different from what it was in the pre-war period.

THE marked increase in the use of electricity on farms since 1910-14 presents the problem as to when electric rates should be introduced into an index of the cost of living on farms. In the 1910-14 period, most of the farms that had electric service were situated close to cities and villages where electric power was readily available. The cost of bring-

ing power to the farm was more than all but a small percentage of the cost that farmers could afford. Probably less than 1 percent of the farms in the United States used electricity, and this to a rather limited extent. Even in post-war years, 1924-29, only about 5 percent used electricity; but by the end of 1936, 15 percent of the farms were receiving electric service.

Careful judgment must be exercised in selecting the period in which the use of electricity became sufficiently "widespread" to be included in an index of the cost of living on farms. In the case of electric power for farm production, it appears that the electric-power rate structure may not yet be sufficiently stabilized to warrant introducing power rates into index numbers with fixed weights.

O. C. STINE,
Chairman, Income Committee.

Retail Food Campaigns Cut Margins

AMONG recent innovations in food marketing are the national selling campaigns conducted by organized groups of retailers for agricultural products of which there is a temporary surplus. Campaigns for the sale of price-distressed farm products were started by the corporate grocery chains in 1936. Other retail groups joined these efforts. Selling campaigns have since been carried on for no less than 20 or 25 agricultural products, the more important of which have been beef, lamb, grapefruit, eggs, apples, and oranges.

It is impossible to know exactly how many retail store units have participated in these campaigns or the nature of their cooperation, but certainly the combined force of their efforts has been considerable. Practically all of the retail units of the chains, which handle about one-third of the total food supply, have taken part in the drives. In addition, the Independent Food Distributors Council, representing more than 150,000 independent retailers, has cooperated in some of the later campaigns, although the proportion of these retailers who actually participated is indeterminate because their store policy is not centrally controlled as in the case of the grocery chains.

IT IS important to distinguish these retail campaigns from other types of advertising programs currently being sponsored for agricultural products. In contrast to the latter, which are usually supported in part by funds subscribed by producers (and in a few cases from tax funds appropriated by State legislatures), the costs of the retail campaigns are borne by the retailers. Another point of difference is that the retail campaigns emphasize the fact that supplies are large and prices low, whereas the commodity advertising programs usually emphasize the special nutritional or health-giving qualities of products.

The merchandising methods used in

these retail drives to step up the sales of the distressed products include special posters and newspaper advertisements, more prominent store display, and word-of-mouth suggestion by employees in the retail store. Usually the drive is accompanied by special price inducements to consumers.

Analyses of the store shipments of several of the larger grocery chains which have participated in these drives show that for some products their sales increased tremendously under the impetus of their selling campaigns. For other products, sales made little or no increase above that indicated by general supply conditions.

Apparently the sales of a commodity which can be displayed prominently and on which no great amount of sales effort had previously been exerted can be stepped up much more effectively through sales promotion than those of staples which are "pushed" more or less constantly in the retail store. (The statement is sometimes made that campaigns of this kind result in an increase in the total consumption of a given product. They may indeed have this effect when producer prices fall so low that part of the crop would otherwise be left unharvested. In general, however, consumption is determined by the volume produced. Any beneficial effects of the campaigns to producers will thus be reflected in an increase in price rather than in the volume of total consumption.)

IT IS virtually impossible to measure the effects of these retail drives on prices to growers. The fact that farm prices change during or after such drives in itself means little, since the change may be due to other factors in the market situation. The campaigns have usually been timed so as to be in full swing when supplies are at their peak and prices at their lowest. This has sometimes been cited as evidence that the drives have

been of little benefit to producers. Such a contention is, of course, groundless, since the prices might have been even lower without the drive.

Bureau of Agricultural Economics studies based on the records of several grocery chains indicate some narrowing of margins during these special campaigns. There are arguments to the contrary but in the opinion of the writer, this narrowing of margins is one of the best features of the programs.

It is generally agreed that growers stand to benefit from any sales emphasis given to their product, but some persons contend that the special retail prices which usually accompany these drives tend to break the market and thus react to the disadvantage of producers. This contention is based on the notion that the price specials offered by some retailers will compel all handlers to bid lower for their supplies and in this way force down the price to the producer.

Price-making is a complex process and may at times be influenced by

considerations of this kind. But it should also be remembered that the best way to induce consumers to buy is to reduce the price; that the more they buy, the stronger is the demand at the producer end of the marketing system.

OF ALL the efforts being made to influence or stimulate the consumption of farm products, the retail campaigns here described seem to be among the most effective. The retailer's intimate contact with the consumer places him in a strategic position to influence the direction of consumer expenditures.

The gains to be made for agriculture as a whole merely by diverting consumer purchases from one food product to another may be questioned. But there will probably be general agreement as to the value of any program which helps to relieve groups of growers who are particularly distressed, especially if the program results in a narrowing of marketing spreads.

A. C. HOFFMAN

Machine-Made Potatoes

MECHANIZATION in potato farming has probably increased more in Central New Jersey in recent years than in most other potato areas. Acreage and production have been expanded; hours of man labor per acre have been reduced; the cost of production per acre has been lowered.

On 60 farms studied cooperatively by the New Jersey Experiment Station and the United States Bureau of Agricultural Economics, it appears that the average potato acreage per farm was increased from 32 in 1926 to 53 in 1931 and to 80 in 1936.

On these farms the hours of man labor per acre of potatoes up to harvest time decreased from 37 in 1926 to 23 in 1931, to 21 in 1936. Ten completely mechanized farms in 1936 used only 17 hours of man labor per acre of potatoes up to harvest time.

But while man labor per acre has been reduced, total labor employment in Central New Jersey has probably been maintained by the expansion in the potato and truck crop acreages.

THE 60 potato farms on which records were obtained in 1931 had nearly one-half of their total crop land in potatoes. Since then a number of farmers have been putting nearly all of their crop land into potatoes.

The incentive to grow the maximum acreage of potatoes instead of corn, wheat, rye, or hay becomes apparent in the comparative values of these crops based on 10-year average yields and prices. The value of an acre of potatoes on this basis in New Jersey has been 4 to 6 times the value of an acre of any of these common field crops.

The high labor and power requirements of potatoes compared with corn, wheat, rye, or hay probably kept down the potato acreage on individual farms until the general-purpose tractor and suitable implements to go with it were developed. By means of these tractors farmers can cultivate potatoes and also prepare the soil.

The standard tractors could not be used to advantage in cultivating row crops. Potatoes are cultivated about 5 times during the season so that a tractor adapted to this operation can be used much more than the standard tractor. The greater number of hours used per year the lower the cost per hour.

IN 1931, of the 60 farmers who were keeping detailed records on their operations, receipts, and expenses, 54 had tractors. Six used horses for all field work. The 54 farmers had 17 standard tractors and 49 general-purpose tractors. The standard tractors were used an average of 271 hours per year; the general-purpose tractors 536 hours.

Forty-nine of these farmers in 1936 had 90 tractors, only 9 of which were standard tractors. The standard tractors were used on an average of 366 hours in 1936 and the general-purpose tractors were used 796 hours. The costs per hour were \$0.82 and \$0.45, respectively.

The machinery on the 10 completely mechanized potato farms on which records were obtained in 1936 cost, new, about \$4,500 per farm. Estimates of farmers in regard to the potato acreage cared for with various implements were as follows:

1 general-purpose tractor	<i>Acres</i>
(2-plow)-----	83
2 general-purpose tractors---	174
1 two-row planter-----	178
1 two-row digger-----	210
1 six-row sprayer-----	193
1 eight-row sprayer-----	232

These estimates indicate that from the standpoint of maximum efficiency in machinery use, 174 acres of potatoes would be a good combination for 2

general-purpose tractors, 1 two-row planter, 1 two-row digger, and 1 six-row sprayer.

A few four-row planters were used, and farmers estimated that one of these could plant 405 acres of potatoes. It is not outside the realm of possibility to have such a planter used in combination with 2 larger tractors, 2 four-row cultivators and 2 six-row sprayers.

ONE disadvantage of highly specialized and mechanized potato farming is the large proportion of cash expense to total expense. A few poor years may cause serious financial difficulties. Another point is the probable effect on soil humus. It is still undetermined whether potatoes can be grown on the same land year after year with only winter cover crops to supply humus.

Specialized potato production may be only a temporary phase of farming in certain areas where soil, climate, and markets appear to give an advantage over other areas. There is no certainty that the organic matter in the soil and the potato yields will be kept up under these practices.

It is conceivable, however, that the advantages of large power machinery will be so great that it will pay to operate certain areas in units of 200 to 300 acres in potatoes for a limited number of years and then return them to general farming. The specialized potato farmer would then go on some other farm or rent additional land and proceed to use some of the supply of humus that was built up in general farming.

This practice has been followed to some extent for years in Imperial Valley, California, where cantaloup and lettuce producers rent, for 3 years at a time, land that has been in alfalfa and dairy farming for 4 or 5 years. Thus truck farming and dairy farming alternate on much of the land that is well adapted to cantaloup and lettuce production. Such a system might work in potato farming.

EMIL RAUCHENSTEIN.

Why Railroads Lose Business

RAIL shipments of fresh fruits and vegetables have declined by approximately 200,000 carloads during the last 7 years—from 1 million carloads in 1931 to 800 thousand in 1937. Since total production during this period increased about 15 percent, if the railroads had merely held their own relative to other methods of transportation they would have hauled 1,150,000 carloads in 1937 instead of only 800 thousand. Thus in 1937 the railroads were 350 thousand carloads short of holding the relative position which they had in 1931.

Reasons for the decline in rail tonnage are not far to seek. They are apparent in every city which continues to cling to outmoded terminal market facilities. Typical is Philadelphia. In 1931 more than half the receipts of fruits and vegetables in Philadelphia, from Eastern States, came by rail. In 1937, less than one-third. The business lost by the railroads, amounting to about 10,000 carloads a year, has been chiefly in hauling produce from New York, Virginia, the Carolinas, Georgia, and Florida.

In 1931, New York State's shipments to Philadelphia were nearly 95 percent by rail. By 1937 this percentage was cut in half, a loss of about 2,700 carloads. Shipments from Virginia, which were 60 percent rail in 1931, dropped to 26 percent in 1937, representing a decline of about 1,000 cars for the railroads.

From North Carolina rail shipments declined from 78 to 31 percent of the total. In South Carolina the reduction was from 97 percent to 80 percent; in Georgia from 99.9 percent in 1931 to 89 percent in 1937; and from Florida only 64 percent of the fruits and vegetables moved to Philadelphia by rail in 1937 compared with 98 percent in 1931.

DECLINING rail movement of fruits and vegetables, illustrated by conditions in Philadelphia, has been attributed to many causes. An

important one, often overlooked, is that wholesale markets to which these products move are often located off the railroad.

In Philadelphia, the principal market is located some distance from the railroad facilities. A peach grower in North Carolina shipping by rail to Philadelphia must truck the peaches to the railroad in the producing area, pay freight to Philadelphia, pay a cartage charge of about \$30 per car to get the peaches from the railroad to the market, and suffer through excessive handling and delay.

The motortruck will haul directly, quickly, for less money, from farm to market. The shipper compares the total costs (freight plus two cartage charges) of rail shipment with the cost of transportation by truck—to the disadvantage of the railroad.

So long as wholesale markets are located off the railroads transportation by rail will decline. A recent study by the Bureau of Agricultural Economics shows that in 35 out of 40 large cities some hauling from railroads to the principal wholesale market is necessary.

RAILROADS have given lip service to their desire to retain the fruit and vegetable business, and have actively opposed competing methods of transportation. But railroads often have overlooked opportunities for constructive action, have sometimes taken action detrimental to their own cause.

New wholesale markets have been built which provide no rail connections with wholesalers' stores or warehouses. In some cities, railroads urged to consider this problem at the time of market construction have manifested no interest, and have actively objected to such rail connections with markets.

In several cities, individual railroads have spent large sums building what they call "a market," but with little regard for its proper location. They have barred all produce except

that arriving over their own lines. The so-called market is really not a market since it does not have available sufficient quantity and variety of products to meet buyers' needs. The new facilities often are largely idle because much of the produce must be hauled by truck to a complete market in some other part of the city.

In a number of cities competing produce terminals of this type have resulted in wastes of millions of dollars through needless duplication of investment, and often actually made the marketing system worse than it was before. Constructive action demands that the railroads cooperate not only with each other but with other agencies so that complete wholesale markets (and in practically no city should there be more than one such market) may be located where deliveries by rail can be made directly into the market buildings, as motor trucks now do.

FAILURE of railroads to deliver produce into the wholesale markets and the setting up of incomplete produce terminal markets result in added cartage charges, wasteful duplication of facilities, delays, and un-

necessary spoilage through excessive handling. It also often means that produce arriving by rail is handled by one more middleman than that arriving by truck, due to the fact that rail receipts often are sold by a wholesale receiver at some place on the railroad to another middleman who is located in the principal market. Produce transported by motor truck goes directly to the middleman in the principal market.

Cartage and handling charges on produce arriving by rail in the wholesale markets of some cities are twice the charges on truck receipts. The comparison is not merely rail rates versus truck rates. Total marketing costs when produce is shipped by rail must be compared with total marketing costs by trucks.

This article is not a complete discussion of the relative merits of the two methods of transportation. Many other factors—refrigeration, flexibility, and the like—have been omitted. But the points discussed should not be overlooked when the railroads begin to give serious consideration to constructive action looking toward maintaining or regaining their fruit and vegetable tonnage.

WILLIAM C. CROW.

Measures of Domestic Demand

[1924-29=100]

	July				Percent change		
	1929	1933	1937	1938	1937-38	1933-38	1929-38
National income.....	107.3	61.9	97.4	85.1	-13	+37	-21
Nonagricultural income:							
Total.....	108.0	62.0	97.8	85.6	-12	+38	-21
Per capita.....	102.6	57.4	87.0	75.7	-13	+32	-26
Factory pay rolls:							
Total.....	109.1	52.3	101.5	68.3	-33	+31	-37
Per employed wage earner.....	102.0	68.6	98.4	87.9	-11	+25	-14
Industrial production:							
Total.....	116.1	93.6	106.7	77.7	-27	-17	-33
Factories processing farm products.....	107.0	114.6	100.6	95.0	-6	-17	-11
Other factory production.....	121.9	84.4	109.6	66.4	-39	-21	-46
Construction activity:							
Contracts awarded, total.....	102.5	17.4	56.2	44.6	-21	+156	-56
Contracts awarded, residential.....	83.3	11.6	39.4	41.2	+5	+255	-51
Employment in production of building materials.....	94.7	41.6	63.2	49.2	-22	+18	-48
Cost of living:							
Food.....	102.6	68.4	82.7	77.1	-7	+13	-25
"All other items".....	97.5	80.7	84.7	85.7	+1	+6	-12
Purchasing power of nonagricultural income per capita:							
For food.....	100.0	83.9	105.2	98.2	-7	+17	-2
For "all other items".....	105.2	71.1	102.7	88.3	-14	+24	-16

NOTE.—All indexes adjusted for seasonal variation except "Cost of living."

General Trend of Prices and Wages

[1910-14=100]

Year and month	Whole-sale prices of all commodities ¹	Industrial wages ²	Prices paid by farmers for commodities used in ³ —			Farm wages	Taxes ⁴
			Living	Production	Living and production		
1920.....	225	222	222	174	201	239	209
1921.....	142	203	161	141	152	150	223
1922.....	141	197	156	139	149	146	224
1923.....	147	214	160	141	152	166	228
1924.....	143	218	159	143	152	166	228
1925.....	151	223	164	147	157	168	232
1926.....	146	229	162	146	155	171	232
1927.....	139	231	159	145	153	170	238
1928.....	141	232	160	148	155	169	239
1929.....	139	236	158	147	153	170	241
1930.....	126	227	148	140	145	152	238
1931.....	107	208	126	122	124	116	217
1932.....	95	179	108	107	107	86	188
1933.....	96	172	109	108	109	80	161
1934.....	109	183	122	125	123	90	153
1935.....	117	192	124	126	125	98	155
1936.....	118	200	122	126	124	107	156
1937.....	126	215	128	135	130	120	-----
July.....	128	219	-----	-----	133	123	-----
August.....	128	221	-----	-----	132	-----	-----
September.....	128	216	129	132	130	-----	-----
October.....	125	214	-----	-----	128	126	-----
November.....	122	206	-----	-----	127	-----	-----
December.....	119	208	126	127	126	-----	-----
1938—January.....	118	204	-----	-----	126	111	-----
February.....	116	208	-----	-----	126	-----	-----
March.....	116	208	123	128	125	-----	-----
April.....	115	204	-----	-----	125	115	-----
May.....	114	201	-----	-----	125	-----	-----
June.....	114	202	122	126	124	-----	-----
July.....	115	205	-----	-----	123	120	-----

Year and month	Index of prices received by farmers [August 1909-July 1914=100]							Ratio of prices received to prices paid
	Grains	Cotton and cottonseed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	
1920.....	232	248	191	-----	174	198	223	105
1921.....	112	101	157	-----	109	156	162	82
1922.....	106	156	174	-----	114	143	141	89
1923.....	113	216	137	-----	107	159	146	93
1924.....	129	212	125	150	110	149	149	94
1925.....	157	177	172	153	140	153	163	99
1926.....	131	122	138	143	147	152	159	94
1927.....	128	128	144	121	140	155	144	91
1928.....	130	152	176	159	151	158	153	96
1929.....	120	144	141	149	156	157	162	95
1930.....	100	102	162	140	133	137	129	87
1931.....	63	63	98	117	92	108	100	70
1932.....	44	47	82	102	63	83	82	61
1933.....	62	64	74	105	60	82	75	64
1934.....	93	99	100	103	68	95	89	73
1935.....	103	101	91	125	118	108	117	86
1936.....	108	100	100	111	121	119	115	92
1937.....	126	95	122	123	132	124	111	93
August.....	119	90	123	104	151	119	109	93
September.....	111	74	121	117	144	123	119	91
October.....	93	67	99	130	136	128	127	88
November.....	85	65	88	124	120	132	135	84
December.....	86	64	76	112	111	136	127	83
1938—January.....	91	66	70	101	110	128	113	81
February.....	89	68	68	121	110	121	94	77
March.....	85	70	69	107	117	117	93	77
April.....	82	71	68	117	114	110	93	75
May.....	79	71	77	99	111	103	98	74
June.....	77	68	73	99	116	98	99	74
July.....	72	71	79	115	123	101	103	77
August.....	62	69	78	96	115	102	105	75

¹ Bureau of Labor Statistics Index with 1926=100, divided by its 1910-14 average of 68.5.

² Average weekly earnings, New York State factories. June 1914=100. Revised.

³ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

⁴ Index of farm real estate taxes, per acre, 1913=100.

⁵ Preliminary.